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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 6186.002	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US03/14239	International filing date (day/month/year) 06 May 2003 (06.05.2003)	Priority date (day/month/year) 12 July 2002 (12.07.2002)
International Patent Classification (IPC) or national classification and IPC IPC(7): G08B 5/00 and US Cl.: 400/472, 486, 489; 341/22; 455/550.1, 557		
Applicant SUSS, DANA		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 3 sheets, including this cover sheet.
- This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 3 sheets.

3. This report contains indications relating to the following items:

- I Basis of the report
- II Priority
- III Non-establishment of report with regard to novelty, inventive step and industrial applicability
- IV Lack of unity of invention
- V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI Certain documents cited
- VII Certain defects in the international application
- VIII Certain observations on the international application

Date of submission of the demand 11 February 2004 (11.02.2004)	Date of completion of this report 15 December 2004 (15.12.2004)
Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer Andrew H Hirshfeld Telephone No. (571) 272-1750 

Form PCT/IPEA/409 (cover sheet)(July 1998)

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US03/14239

I. Basis of the report

1. With regard to the elements of the international application:*

- the international application as originally filed.
- the description:
pages 1-13 as originally filed
pages NONE, filed with the demand
pages NONE, filed with the letter of _____.
- the claims:
pages NONE, as originally filed
pages NONE, as amended (together with any statement) under Article 19
pages 14-16, filed with the demand
pages NONE, filed with the letter of _____.
- the drawings:
pages 1-6, as originally filed
pages NONE, filed with the demand
pages NONE, filed with the letter of _____.
- the sequence listing part of the description:
pages NONE, as originally filed
pages NONE, filed with the demand
pages NONE, filed with the letter of _____.

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.
These elements were available or furnished to this Authority in the following language _____ which is:

- the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in printed form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description, pages NONE
- the claims, Nos. 15-19
- the drawings, sheets/fig NONE

5. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).
** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/US03/14239

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. STATEMENT

Novelty (N)

Claims 1-14 YES
Claims NONE NO

Inventive Step (IS)

Claims 1-14 YES
Claims NONE NO

Industrial Applicability (IA)

Claims 1-14 YES
Claims NONE NO

2. CITATIONS AND EXPLANATIONS

Claims 1-7 meets the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest a data entry interface arrangement with a non-staggered, linearly aligned six-row matrix consisting of a first set of two rows, a second set of two rows, and third set of two rows, wherein the first set consists of all letters in the top row of the QWERTY keyboard.

Claims 8-14 meets the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest a mobile telephone for efficient entry of data, wherein the data input area comprises a non-staggered, linearly aligned six-row matrix consisting of a first set of two rows, a second set of two rows, and third set of two rows, wherein the first set consists of all letters in the top row of the QWERTY keyboard.

Claims 1-14 meet the criteria set out in PCT Article 33(4), and thus meet industrial applicability because the subject matter claimed can be made or used in industry.

----- NEW CITATIONS -----

I claim:

1. A data entry interface arrangement, comprising:

A six-row matrix including all twenty-six letters of the Roman alphabet, wherein said six-row matrix is arranged according to a relationship whereby a letter 5 within a first, second, or third row of a standard three-row QWERTY keyboard is placed in an additional row substantially below said first, second, or third row.

2. The data entry interface arrangement of claim 1, wherein said six-row matrix includes between three and six letters per row.

- 10 3. The data entry interface arrangement of claim 1, wherein each additional row comprises every other letter within said first, second, or third row of said standard three-row QWERTY keyboard.

4. The data entry interface arrangement of claim 1, wherein no two adjacent letters in any row are in alphabetical order.

- 15 5. The data entry interface arrangement of claim 1, wherein said matrix comprises:

QETUO
WRYIP
ADGJL
SFHK
ZCBM
XVN

20

6. The data entry interface arrangement of claim 1, wherein said letters are manifested electronically upon a touch screen.

- 25 7. The data entry interface arrangement of claim 1, wherein said letters are disposed upon a plurality of keys or buttons.

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ART 34 AMDT

8. A method for designing a data entry interface layout including letters of the Roman alphabet thereon, comprising the step of:

transposing the letters of the Roman alphabet on a standard three-row QWERTY keyboard into a six-row matrix, wherein a letter within a first, second, or third row of said three-row QWERTY keyboard is placed in an additional row substantially below said first, second, or third row.

5
9. The method of claim 9, wherein said six-row matrix includes between three and six letters per row.

10. A method for designing a data-entry interface layout including letters of the Roman alphabet thereon, comprising the step of:

transposing the letters of the Roman alphabet on a three-row QWERTY keyboard into a six-row matrix, wherein every other letter within a first, second, or third row of said three-row QWERTY keyboard is placed in an additional row substantially below an adjacent letter of said first, second, or third row.

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11. The method of claim 10, wherein said adjacent letter is a following letter.

12. The method of claim 10, wherein said layout comprises:

QETUO
WRYIP
ADGJL
SFHK
ZCBM
XVN

20

REPLACED BY
ART 34 AMDT

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13. The method of claim 10, wherein said adjacent letter is a preceding letter.

14. A mobile telephone keypad for efficient entry of data, comprising:

a mobile telephone having a data input area; and

all letters of the Roman alphabet generally arranged in a matrix of six rows upon

5 said data input area.

15. The mobile telephone keypad of claim 14, wherein said matrix of six rows includes between three and six letters per row.

16. The mobile telephone keypad of claim 14, wherein no two adjacent letters in any row are in alphabetical order.

10 17. The mobile telephone keypad of claim 14, wherein said matrix comprises:

QETUO
WRYIP
ADGJL
SFHK
ZCBM
XVN

15

18. The mobile telephone keypad of claim 14, wherein said letters are manifested electronically upon a touch screen.

19. The mobile telephone keypad of claim 14, wherein said letters are disposed upon a 20 plurality of keys or buttons.

REPLACED BY
ART 34 AMDT